

In the Claims

This listing of claims will replace all previous listings of claims in the application. Please cancel Claims 1-8. Please add new claims 13-16.

What is claimed is:

1-12 Cancelled.

13. (new) A multiplexer for combining a plurality of compressed video input data streams into an output data stream with low latency, each compressed input video data stream divided into input video frames, each output data stream divided into output video frames, the multiplexer comprising:

- a. a buffer, the buffer capable of holding a plurality of output video frames;
- b. logic combining corresponding video frames from each input data stream to form in the buffer a corresponding video frame for the output data stream;
- c. a scheduler adapted to rearrange the order of data in the buffer, the order of data in the buffer determining transmission time of video data in the output video stream, the scheduler rearranging the order of video data such that the latency of the video data in the output data stream is not thereby increased including:
 - logic for dividing each corresponding input frame in the buffer that is larger than a threshold size into at least two parts, and
 - logic for moving at least one part of each corresponding input frame in the buffer that is larger than a threshold size such that the at least one part of the corresponding input frame is transmitted earlier in the output data stream than the corresponding video frame for the output data stream is transmitted.

14. (new) A multiplexer according to claim 13, wherein the threshold

size is predetermined.

15. (new) A multiplexer according to claim 13, wherein the threshold size is determined adaptively.

16. (new) A multiplexer according to claim 13, wherein at least one of the input data streams is an MPEG-encoded video stream.